

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A method of transmitting packets between first and second networks of different address formats, comprising the steps of:

- a) receiving, from a first network, a packet containing first address data conforming to said first network format and second address data conforming to said second network format, said first address data being contained in a packet header of the packet and said second address data being contained in an auxiliary header of the packet;
- b) rewriting said first address data with said second address data; and
- c) transmitting the packet to said second network.

2. (original): The method of claim 1, wherein said auxiliary header further contains auxiliary information.

3. (previously presented): The method of claim 2, wherein the step (b) further comprises eliminating from said packet a field in which said second address data has been contained when said packet was received from said first network.

4. (original): The method of claim 1, wherein the step (b) further comprises writing said first address data into said auxiliary header.

5. (original): The method of claim 1, wherein the step (b) comprises the steps of:
making a search through a received packet;
examining a database if said auxiliary header is not contained in the received packet and
detecting address data mapped to said first address data; and
converting the first address data with the detected address data.

6. (currently amended): An address converter for use in a gateway connected between first and second networks of different address formats, comprising:
receive means for receiving, from said first network, a packet containing first address data conforming to said first network format and second address data conforming to said second network format, said first address data being contained in a packet header of the packet and said second address data being contained in an auxiliary header of the packet;
control means for rewriting said first address data with said second address data; and
transmit means for transmitting the packet to said second network.

7. (original): The address converter of claim 6, wherein said auxiliary header further contains auxiliary information.

8. (currently amended): The address converter of claim 7, wherein the control means is arranged to eliminate, from said packet, a field in which said second address data has been contained when said packet was received from said first network.

9. (original): The address converter of claim 6, wherein said control means is arranged to write said first address data into said auxiliary header.

10. (original): The address converter of claim 6, wherein said control means comprises a database and is arranged to:

make a search through a received packet;

examine said database if said auxiliary header is not contained in the received packet and detecting address data mapped to said first address data; and

convert the first address data with the detected address data.

11. (not entered): The method of claim 1, wherein said method is not exclusively used to preserve a multicast address in a token-ring network.

12. (not entered): The address converter of claim 6, wherein said address converter is not exclusively configured to preserve a multicast address in a token-ring network.

13. (not entered): The method of claim 1, wherein both said first address data and said second address data are used for routing purposes by said first network and said second network, respectively.

14. (not entered): The method of claim 13, wherein both said first address data and said second address data are used for routing the packet to a gateway.

15. (not entered): The address converter of claim 6, wherein both said first address data and said second address data are used for routing purposes by said first network and said second network, respectively.

16. (not entered): The address converter of claim 15, wherein both said first address data and said second address data are used for routing the packet to a gateway.

17. (previously presented): The method of claim 1, wherein both said first address data and said second address data are used for routing purposes by said first network and said second network, respectively.

18. (currently amended): The method of claim ~~13~~17, wherein both said first address data and said second address data are used for routing the packet to a gateway.

19. (previously presented): The address converter of claim 6, wherein both said first address data and said second address data are used for routing purposes by said first network and said second network, respectively.

20. (currently amended): The address converter of claim ~~15~~19, wherein both said first address data and said second address data are used for routing the packet to a gateway.